

# GREEN LIVING CIRCLE RECONSTRUCTION

from Nature to Community





## Project Statement

Longzhu Lake Park, situated in Hanshou County, Hunan Province, China, covers an expanse of 36 hectares and was finalized in 2016. The project is centered around three key aspects: community health, water health, and ecological health. Following its establishment, it has catalyzed the progress of adjacent commercial complexes, new residential infrastructure, educational institutions, and recreational facilities. Presently, the park harbors 136 varieties of indigenous trees, shrubs, and grasses. By creating a verdant habitat for humans, it also offers a superior living environment for species in the Dongting Lake basin region, thus emerging as the driving force behind the establishment of the community life circle in Hanshou County. Since its completion, the local urban population has witnessed an average annual growth of over 5,000 individuals, underscoring the populace's appreciation for a sustainable community life circle.

## Project Narrative

### 1. Background: Dongting Lake System, Urban Ecological Protected Area & Community Park

Longzhu Lake Park, a county-level comprehensive park, is situated in the southeast of the urban area of Hanshou County, Changde City, Hunan Province, China. Spanning a total area of 36 hectares, the park was fully developed in 2016. Its layout takes the form of an irregular north-south rectangular shape, comprising 8 hectares of water area, 20.6 hectares of green space, 2.2 hectares designated for internal roads, 5 hectares allocated for plaza paving, and 0.2 hectares housing public buildings. Additionally, the park offers 249 ecological parking spaces.

### 2. Vision and Strategies: Community Health, Water Health & Ecological Health

Longzhu Lake Park, strategically located near the Western Dongting Lake National Nature Reserve, has been developed with a focus on 'community health,' 'water health,' and 'ecological health.' This project has spurred the growth of nearby commercial complexes, residential infrastructure, educational institutions, and recreational facilities. Presently, the park boasts 136 species of local trees, shrubs, and grasses, enhancing the green environment for residents and providing a high-quality habitat for species in the Dongting Lake basin. It serves as a vital green hub in building the community life circle in Hanshou County.

Longzhu Lake Park is highlighted by four key features. Firstly, designated as an 'Urban Protected Area,' it stands as the largest green recreational space within the developed region of Hanshou County, aligning with the county's land use master plan. Secondly, it plays a crucial role as a 'Key Stepping Stone' in establishing a green security framework in the urban and rural settings of the Dongting Lake basin, acting as a vital barrier for the local migration and habitat of reptiles, fish, and birds. Thirdly, by offering 'Diversity Service,' the park provides citizens with diverse landscapes and recreational areas, while also indirectly fostering the growth of surrounding community infrastructure, benefiting nearby residents. Lastly, it forms an integral part of the 'Healthy Water System' essential to the water management of Hanshou County.



### **3. Landscape System Design of Longzhu Lake Park**

#### **(1) Community Health: Charming Social Places, Diverse Sports Venues & Urban Growth**

The community health strategy is evident in three specific aspects, with 'Charming Social Places' being a crucial component. Longzhu Lake Park provides different spaces for relaxation and activities, catering to citizens' social interaction needs and promoting healthy neighborhood relationships through diverse landscapes. The child-friendly design in activity spaces offers children plenty of opportunities to engage with nature and participate in family activities.

Equally significant are the park's 'Diverse Sports Venues.' Shaded plazas are designed to meet the activity needs of local residents, particularly the elderly, offering spaces for activities such as Tai Chi and square dancing. A 1.5km running track, known for its vibrant signage system and runner-friendly surface material, is also present. Furthermore, the park features courts for ball sports like basketball, table tennis, and badminton, as well as various fitness facilities dispersed throughout the area. Thanks to the park's close proximity to the community, these venues are easily accessible.

Longzhu Lake Park not only enhances the town's appeal but also contributes to its growth. The construction of new residential projects and community infrastructure around the park has led to the development of a well-established community life circle. This network includes primary and secondary schools, a nursing home, banks, a community hospital, and commercial complexes, all centered around green spaces, creating a public service system that is friendly towards people of all ages. Since the project's completion, the urban population in the surrounding area has been increasing by an average of over 5,000 people annually, indicating the community's appreciation for a green living environment.

#### **(2) Water Health: 'Six Lakes Connection' Water Corridor Pattern & Stormwater Management**

The water health strategy has two main components. Firstly, it contributes to the 'Six Lakes Connection' water corridor pattern in Hanshou County, connecting West Lake, East Lake, South Lake, Yinshui Lake, and Qingshui Lake, which in turn links to the natural water system of Western Dongting Lake. Secondly, it serves as a key element in urban stormwater management. The park's design aligns with the flood risk management standard of Hanshou County urban area, ensuring discharge of extreme rainfall events occurring once every 20 years within a 24-hour period. This is achieved through stepped and sunken terrain designs, as well as rain garden features for systematic rainwater management. Additionally, permeable hard paving materials are utilized throughout the park, including permeable bricks in plazas, wooden boards on forest trails and waterfront platforms, and small retaining walls constructed using gabions.

#### **(3) Ecological Health: Extending Suburban Biodiversity to Urban & Lively Ecological Scene**

The ecological health strategy is demonstrated in two main areas. Firstly, it emphasizes the concept of 'Extending Suburban Biodiversity to Urban Areas.' Longzhu Lake Park serves as a crucial link in facilitating the integration of the city's peripheral greenery systems with urban green spaces. Secondly, the strategy includes the creation of 'Lively Ecological Scenes' specifically designed for the native species of Western Dongting Lake. By establishing suitable habitats and a diverse range of ecological landscapes, the park is gradually enhancing the quality of the local ecological environment and promoting scenes of harmonious coexistence between humans and nature.



# GREEN LIVING CIRCLE RECONSTRUCTION : FROM NATURE TO COMMUNITY PARK

Longzhu Lake Park is located in Hanshou County, Changde City, Hunan Province, China. The project covers an area of 36 hectares, which is the largest park in the county. The completion of the park activates the development of the new town and strengthens the connection between communities. Moreover, it provides the surrounding communities with a green place for sightseeing, fitness, entertainment and leisure.



National Nature Reserve: Dongting Lake

**36 hm<sup>2</sup>** Urban multi-functional park

**8.13 hm<sup>2</sup>** Lake area

**120,000** Service population

**136** Native plant species



Shoushan Hill

Dinosaur Amusement Park

FR Avenue

Children's Park

Sports Park

LONGZHU LAKE PARK

Entrance Square

Ecological Parking Lot



# URBAN PROTECTED AREA

In the Territorial Spatial Planning of Hanshou, Hunan Province, China (2021-2035), Longzhu Lake Park is designated as the largest nature reserve within the urban district.



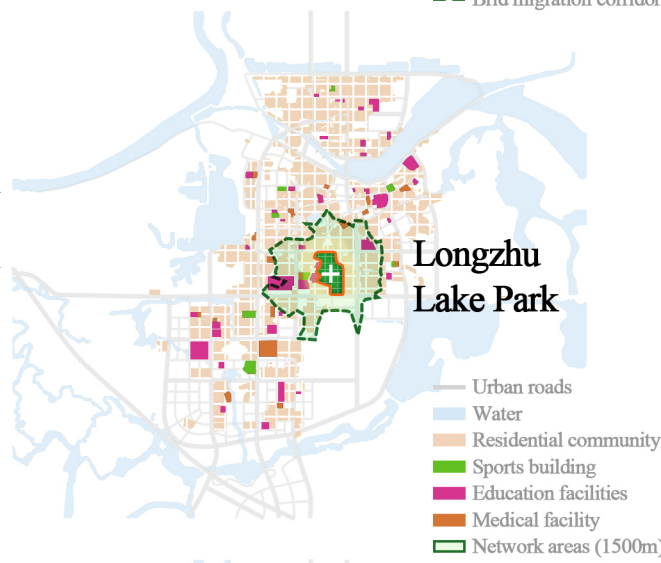
# THE KEY ' STEPPING STONE '

Serving as a crucial ecological habitat for local wildlife, including transit mammals and birds, Longzhu Lake Park acts as a vital migration stopover and habitat.



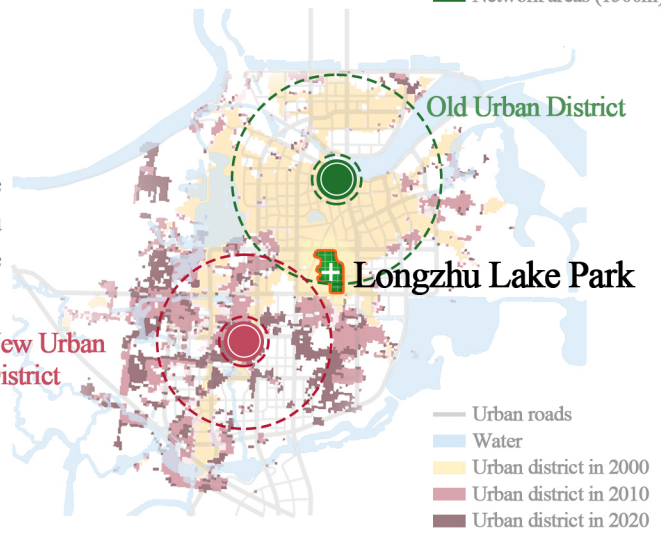
# RESILIENT SERVICE

Longzhu Lake Park offers a range of ecosystem services, such as improving air quality and providing cultural experiences for visitors, with each function being adaptable based on needs.



# HEALTHY URBAN ECOSYSTEMS

Positioned as the transitional zone between the old city and new urban development, Longzhu Lake park serves as a key focal point for the healthier development of the new urban area.





# COMMUNITY HEALTH

## Charming social places

After completion, Longzhu Lake Park has become a place for surrounding residents' leisure, entertainment and public activities, and an important landscape node in Hanshou County. It not only enriches the life of the citizens, but also increases the community cohesion and promotes the healthy development of the society.



Conversation scene

Visit sightseeing scene

Walking leisure scene



Waterfront social space

Lawn picnic space



Lawn kite party



Fishing game



Walk the dog

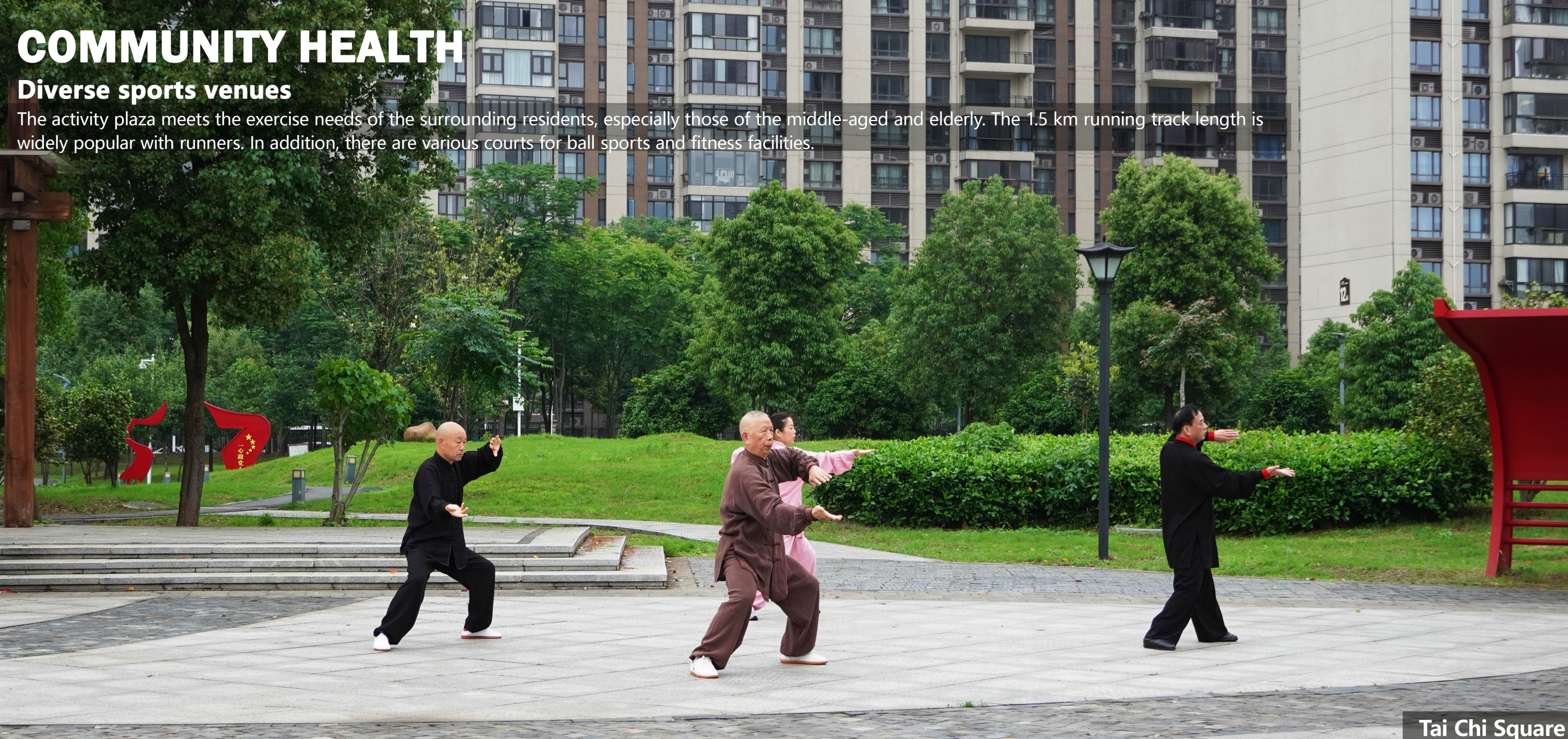


Comprehensive amusement park

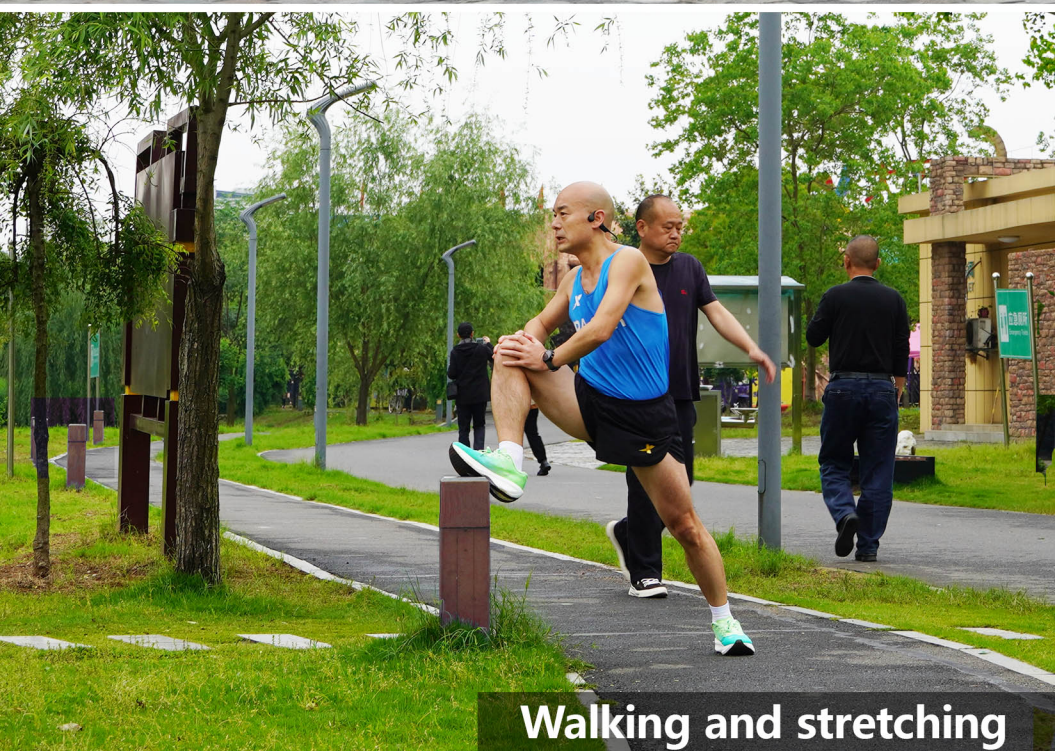


Unpowered playground





Tai Chi Square



Walking and stretching



Runway



Table tennis and fitness equipment



# COMMUNITY HEALTH

## Growth factors for urban area

The construction of Longzhu Lake Park has driven the addition of a batch of housing infrastructure in the surrounding area. At the same time, diverse formats such as commercial complexes and amusement facilities are constantly being attracted. The urban area was expanded.



Educational facilities and commercial complexes



Child friendly entertainment facilities



Roads directly connected to the community



# COMMUNITY HEALTH

## Growth factors for urban area

Since the completion of the project, the urban population has experienced an average annual increase of over 5,000 people. This growth reflects the increasing appreciation of individuals for a sustainable and environmentally friendly community lifestyle.



Sports



Entertainment



Commerce



Residence





# WATER SYSTEM HEALTH

## Participate in regional water system

Water systems, including rivers and lakes, inside and outside the city are connected to artificial water surfaces, forming the water system of the region. Longzhu Lake is one of the artificial lakes in the city.



💧 Weidi Lake

💧 Yinshui Lake

💧 Longzhu Lake

💧 Longzhu Lake

Dongting Lake System  
Dongting Lake System



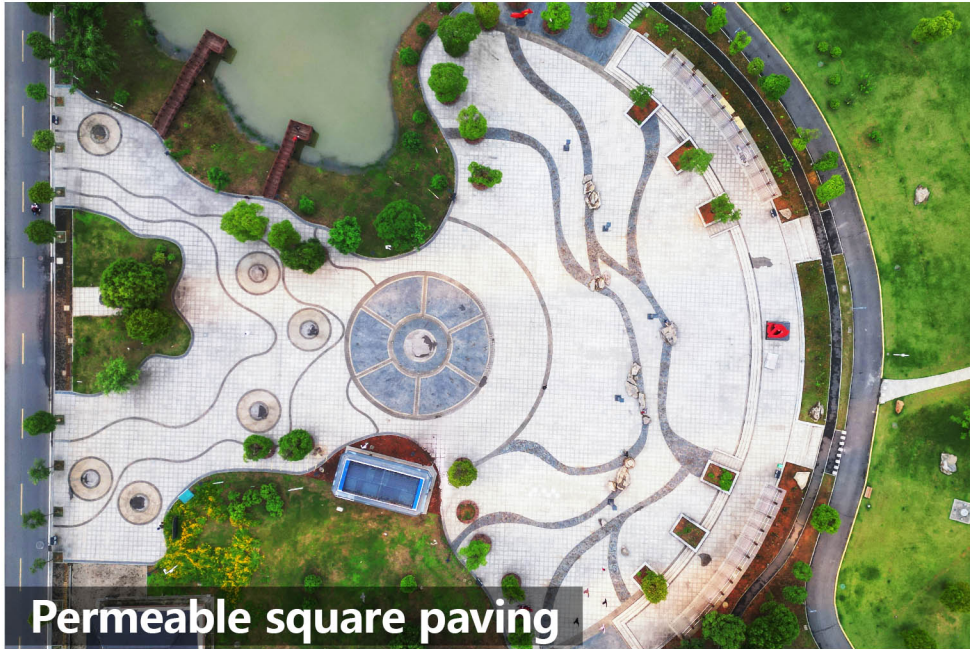
# WATER SYSTEM HEALTH

## Reduce the risk of urban waterlogging

The park is able to absorb no less than X cubic meters of external water through terrain design and the use of materials such as wood, stone, and permeable bricks, achieving rainbow management and reducing the risk of urban waterlogging.



Permeable waterfront platform



Permeable square paving



Rainwater garden and wooden boardwalk



# ECOSYSTEM HEALTH

## Extending suburban biodiversity to urban area

The area is adjacent to the ecological protection belt of Dongting Lake (the second largest freshwater lake in China). By analyzing the types of habitat present in the area and the types of wildlife present or potential wildlife species in and around the area, we are proposed to realize the extension of the ecological protection zone of Dongting Lake to the urban area.





# ECOSYSTEM HEALTH

## Lively ecological scene

The completion of Longzhu Lake Park has gradually improved the local ecological environment quality, and the park has created a variety of ecological scenes, making the phenomenon of harmonious coexistence between human and nature constantly appeared.

